

## § 572.32

Drawing No.	Revision
78051-89 upper torso assembly-complete, dated May 20, 1978 .....	(K)
78051-70 lower torso assembly-complete, dated June 30, 1998, except for drawing No. 78051-55, "Instrumentation Assembly-Pelvic Accelerometer," dated August 2, 1979 .....	(F)
86-5001-001 leg assembly-complete (LH), dated March 26, 1996 .....	(A)
86-5001-002 leg assembly-complete (RH), dated March 26, 1996 .....	(A)
78051-123 arm assembly-complete (LH), dated May 20, 1996 .....	(D)
78051-124 arm assembly-complete (RH), dated May 20, 1978 .....	(D)
78051-59 pelvic assembly-complete, dated June 30, 1998 .....	(G)
78051-60 pelvic structure-molded, dated June 30, 1998 .....	(E)

(4) Disassembly, Inspection, Assembly and Limbs Adjustment Procedures for the Hybrid III dummy, dated June 1998.

(5) Sign Convention for signal outputs—reference document SAE J1733 Information Report, titled "Sign Convention for Vehicle Crash Testing", dated 1994-12.

(6) Exterior dimensions of the Hybrid III dummy, dated July 15, 1986.

(b) [Reserved]

(c) Adjacent segments are joined in a manner such that throughout the range of motion and also under crash-impact conditions, there is no contact between metallic elements except for contacts that exist under static conditions.

(d) The weights, inertial properties and centers of gravity location of component assemblies shall conform to those listed in drawing 78051-338, revision S, titled "Segment Weights, Inertial Properties, Center of Gravity Location—Hybrid III," dated May 20, 1978 of drawing No. 78051-218.

(e) The structural properties of the dummy are such that the dummy conforms to this part in every respect both before and after being used in vehicle

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test specified in Standard No. 208 of this chapter (§ 571.208).

[51 FR 26701, July 25, 1986, as amended at 53 FR 8764, Mar. 17, 1988; 57 FR 47010, Oct. 14, 1992; 61 FR 67955, Dec. 26, 1996; 62 FR 27514, May 20, 1997; 63 FR 5747, Feb. 4, 1998; 63 FR 53851, Oct. 7, 1998]

### § 572.32 Head.

(a) The head consists of the assembly shown in drawing 78051-61X, revision C, and conforms to each of the drawings subtended therein.

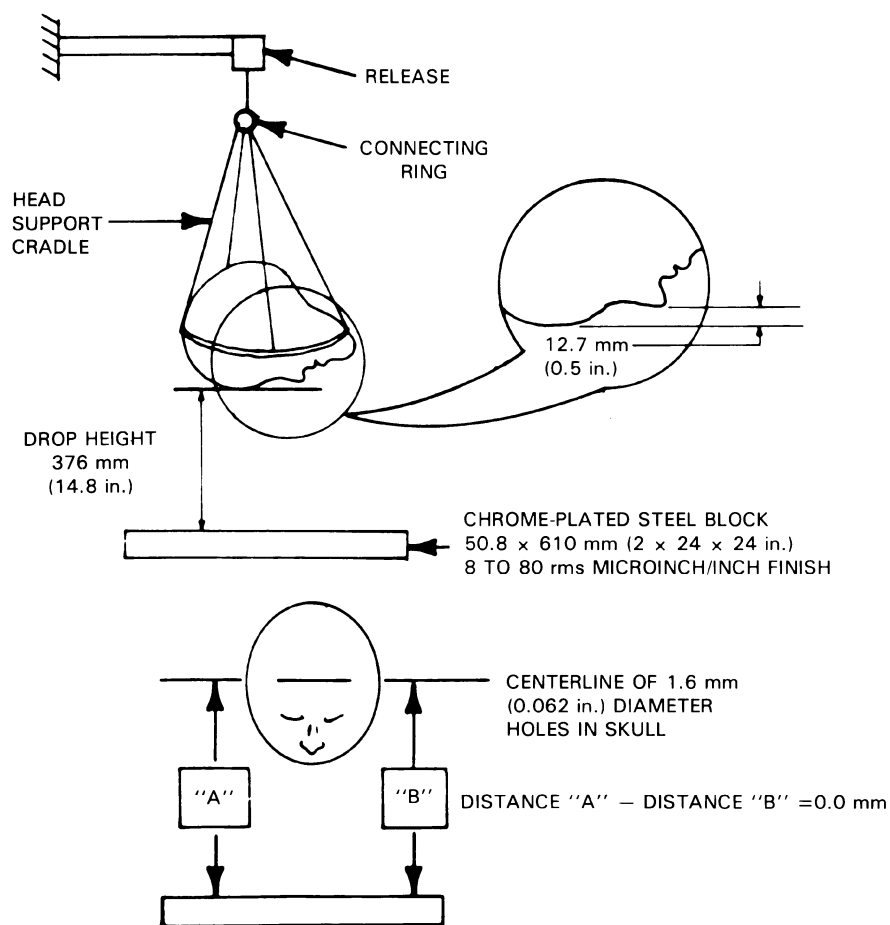
(b) When the head (Drawing number 78051-61X, titled "head assembly—complete," dated March 28, 1997 (Revision C) with six axis neck transducer structural replacement (Drawing number 78051-383X, Revision P, titled "Neck Transducer Structural Replacement," dated November 1, 1995) is dropped from a height of 14.8 inches in accordance with paragraph (c) of this section, the peak resultant accelerations at the location of the accelerometers mounted in the head in accordance with § 572.36(c) shall not be less than 225g, and not more than 275g. The acceleration/time curve for the test shall be unimodal to the extent that oscillations occurring after the main acceleration pulse are less than ten percent (zero to peak) of the main pulse. The lateral acceleration vector shall not exceed 15g (zero to peak).

(c) *Test procedure.* (1) Soak the head assembly in a test environment at any temperature between 66 degrees F to 78 degrees F and at a relative humidity from 10% to 70% for a period of at least four hours prior to its application in a test.

(2) Clean the head's skin surface and the surface of the impact plate with 1,1,1 Trichlorethane or equivalent.

(3) Suspend the head, as shown in Figure 19, so that the lowest point on the forehead is 0.5 inches below the lowest point on the dummy's nose when the midsagittal plane is vertical.

**FIGURE 19**  
**TEST SET-UP SPECIFICATIONS**



NOTE: TOLERANCE ON TEST SETUP DIMENSIONS  $\pm 1$  mm (0.04 in.)

(4) Drop the head from the specified height by means that ensure instant release into a rigidly supported flat horizontal steel plate, which is 2 inches thick and 2 feet square. The plate shall have a clean, dry surface and any microfinish of not less than 8 micro-

inches (rms) and not more than 80 microinches (rms).

(5) Allow at least 3 hours between successive tests on the same head.

[51 FR 26701, July 25, 1986, as amended at 62 FR 27514, May 20, 1997]